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ABSTRACT

This report outlines the work of the Fort McMurray School District in Alberta, Canada, to develop a set of indicators of and standards applicable to students' social skills, behaviors, and attitudes. The indicators and standards are intended to be used to assess the quality of a selected portion of the district's education program and delivery. The report describes the development of an expanded model of social competence, the use of standardized instruments, and the development of a three-level approach to measuring and reporting social skills development. At the center of this approach is the Social Skills Diagnostic Screen (SSDS), a checklist developed by the district to ascertain a student's social development. The first level of the three-part approach is reporting to parents, at report card time, the social development of their children. Should the parent or teacher require further information regarding social development, the SSDS can be used as the second level. The third level of measurement requires the administration of standardized instruments by qualified professionals. Four appendixes contain SSDS pilot test results, examples of district report cards, the SSDS itself, and an SSDS composite profile form. (MDM)

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A Study to Identify and Measure Desirable Student Social Outcomes

Fort McMurray School District No. 2833

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Educational Quality Indicators:
Collaboration in Action

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A Study to Identify and Measure Desirable Student Social Outcomes

Fort McMurray School District No. 2833

Under Contract to Alberta Education
Edmonton, Alberta

Please Note

The views and recommendations expressed in this report are those of the researchers and not necessarily those of the Department of Education.

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A number of schools were involved in norming the screen: Fort McMurray Composite High School, Greely Road School and Westview School. Parents, teachers and staff of these schools all devoted time and energy towards the norming.

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Leigh Anne Willard prepared the *Social Skills Diagnostic Screen Administration Manual* and Anne Sherman developed the *Social Skills Development Activity Manual*. Both manuals were edited by Paula Hanson. These documents are valuable products of Fort McMurray Public's EQI Project and enhance the value of the research for other school districts.

Over the three years of the project, the team was coordinated by Dr. David Young, Leigh Anne Willard and Jeff Lodge. Without the dedication and leadership of this group, the project might not have been completed. It is then, with much appreciation that Fort McMurray School District No. 2833 acknowledges the coordinators' contributions and offers sincere thanks to all the individuals who made this EQI project a success.

Abstract

This report outlines one school jurisdiction's efforts to develop a set of social skills, behaviors, attitude indicators and standards that can be used to assess the quality of a selected portion of that district's educational program and delivery. It describes the development of an expanded systems model of social competence, the use of standardized instruments, and finally the development of a three-level approach to measuring and reporting social skills development.

Level one of the three-level approach consists of teachers reporting to parents, at report card time, the social development of their children. Should the parent or teacher require further information regarding social development, the *Social Skills Diagnostic Screen* can be used at level two. The third level requires the administration of standardized instruments by qualified personnel.

The project produced an administration manual for the *Social Skills Diagnostic Screen* and an activity manual to help teachers assist children in the development of prosocial behaviors.

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Chapter One

Introduction

Background

Fort McMurray School District No. 2833 consists of twelve schools - ten elementary/junior high schools and two high schools - all of which are located within the city. The district has four major goals: to ensure that all students reach levels of skill and knowledge that are consistent with their varying abilities; that students perform at levels equal to or above established norms; that students develop positive attitudes towards learning and toward themselves and others; and that students develop into productive citizens.

Since 1982, the district has been involved in the development of student performance indicators and standards. The first Annual System Student Evaluation Report (1986-1987) was presented to trustees by the district administration in October 1987. The report drew together data from a variety of sources and included information on the educational health of students in the system across four domains: academic, behavioral/emotional/attitudinal, physical, and cultural. The processes introduced to identify and collect the data took up to four years to develop and implement, and served as testimony to the district's commitment to the collection and reporting of quality data on student performance. The first report represented a major effort to provide "measurable" evidence to the trustees and the public on the health of the district's educational efforts.

Although the defined outcomes and standards of the district's "indicator system" formed a solid basis for future development, specific indicators and their associated standards were quickly identified as needing revision and refinement. The indicators and standards considered to require the most revision were those related to the area of social skills, behaviors and attitudes. In particular, there was deemed to be a need to shift the conceptual emphasis from a focus on "negative" indicators to those of a more "positive" nature.

In response to this need, the Fort McMurray School District No. 2833 participated in a project to both identify quality indicators relating to social skills outcomes, and to develop a practical measurement strategy that enables teachers to assess student social skills and report them in a meaningful way to parents. This assessment of student social competence forms one component of a collaborative initiative between Alberta Education and twelve school jurisdictions throughout the province that centres upon the development of educational indicator systems. The Educational Quality Indicators (EQI) initiative was designed to develop indicator systems capable of accurately measuring the quality of education, thus providing a basis for improved system planning, policy and decision making.

The indicators developed are intended to measure educational quality in a meaningful way, such that a firm basis may be laid to address ongoing educational improvement and accountability. The collaborative approach between Alberta Education and the twelve school jurisdictions was further designed to provide an opportunity for the review of major educational questions, the operationalization of appropriate methods of research, and the use of collective insight in the interpretation of major project findings.

Rationale

Fort McMurray School District No. 2833's focus on student social skills, or social competence, reflected the district's recognition of the broadening mandate of the school in society. Schools appear to be becoming more accountable for knowledge, skill and attitude outcomes that relate to a variety of topical social areas, such as smoking, environment, AIDS, suicide prevention and so forth. More broadly, schools appear to be becoming increasingly responsible for the development of socially competent young people although, as educators at all levels point out, schools form but one element of society and therefore cannot reasonably be expected to stand alone as separate voices of reason or social change without the support of students' families and communities. Expanding educational roles aside, there remains a practical need for educators to understand what constitutes a socially competent individual, how to assess the competencies, and how to report on them in a meaningful way. In addition, all of this needs to be done in ways which are valid and reliable, and yet also remain feasible in the school context.

At a different level, there is a definite further need for ongoing research into the general construct of social competence and its measurement. Despite a considerable body of research linking student social competence with the subsequent development of appropriate social, academic and psychological functioning, existing definitions of social competence, as well as the varied array of skills subsumed within it, lack cohesiveness and consistency. In the absence of some consensus relating to these key dimensions of student development, valid assessments of the quality and outcomes of education remain incomplete.

From a practical viewpoint, the development of educational indicators relating to student social competence may be further related to the district need for a tool that provides the basis for an accurate assessment as to how well the district is meeting part of its own mission statement relating to student development of positive attitudes towards learning, themselves and others.

Purposes of the Study

The purpose of the study was to develop a set of social skills, behaviors and attitude indicators, and standards, which would then be used to assess the quality of a selected portion of one school jurisdiction's educational program and delivery.

Five specific tasks were defined:

1. to identify or develop a set of desirable student social skills;
2. to identify or develop measurable outcomes and standards for the desirable student social skills;
3. to establish a methodology for collecting, analyzing and interpreting the data;
4. to identify or develop strategies for teaching the identified desirable student social skills; and
5. to identify or develop a means for reporting information and findings to users.

Definitions

For the purposes of this study, the following definitions of key terms are provided.

- **Social Competence or Competent Social Response** is used to refer to the general construct that encompasses all of those responses which, within a given situation, may be judged or perceived by the recipient of a response, to indicate that the person performing a 'task' has done so effectively or appropriately.
- **Social Skills** as part of the broader construct of social competence, social skills are the specific behaviors an individual exhibits in order to perform a task competently.
- **Social Skills Assessment** is the means or methods used to evaluate the existence/extent of a social skill or skills.

Research Design

The research process was structured around three major phases: an initial review of the social skills and social competence literature supported by the development of a model of social competence; the selection of standardized instruments for the measurement of social competence and their subsequent field testing; and, finally, the development of a comprehensive approach to the assessing and reporting of student social competence and its subsequent pilot testing. Throughout the study, the research process followed was exploratory in nature with initial research findings forming the basis for further study and review.

Delimitations

The following are the delimitations of the study:

1. The study focussed on student social competence primarily as it relates to classroom interactions. Although social competence forms a broad concept, this focus on the classroom dimension was consistent with the study objectives.
2. The focus throughout the study was on the need for a practical assessment model that could be easily used within the school environment and did not require substantive resources to implement.
3. The study was scheduled for completion over three years.

Limitations

The following were the limitations of the study:

1. The study focussed on small sample populations, which included students in three schools in Fort McMurray.
2. Changes in project staff over the course of the study resulted in some loss of continuity in the research process.
3. The study was limited by the practical issues of the limited availability of resources, and research time. The major outcome of this was the limited opportunity for the pilot testing of the models developed.

Report Structure

The remainder of the report is organized into five chapters. Chapter Two outlines the current research findings relating to the nature and assessment of social competence. Chapter Three summarizes the research design. Chapter Four describes the conceptual model of social competence developed, as well as a review of the three-level measurement and reporting approach introduced in the district. Chapter Five describes the *Social Skills Diagnostic Screen.* Chapter Six provides a summary of the study, its conclusions, implications, and recommendations.

Chapter Two

Related Literature

The development of appropriate student social skills and their subsequent assessment has received considerable attention within the educational literature. Despite the large body of literature, however, widely accepted definitions of social skills and the broader concept of social competence remain illusive, as do definitive listings of what should and should not be included in descriptions of both social skills and competence. Given the absence of universally accepted definitions of just what social competence includes, as well as which specific social skills are considered appropriate in a particular context, measurement strategies for recording levels of student social development also remain diverse and varied.

The Nature of Social Competence and Social Skills

In defining social competence and social skills, numerous authors have offered a broad array of definitions which vary both in terms of their philosophical emphasis as well as their specific focus. Generally, the majority of authors have focussed on the more specific term of social skills which has been defined as the specific behaviors that an individual demonstrates to perform competently on tasks (McFall, 1982; Libet & Lewinsohn, 1973; Cartledge & Milburn, 1986).

As part of a broader conceptual model, social skills has been considered by a number of authors to form one component of the larger construct of social competence. McFall (1982), for example, clearly distinguishes between the two concepts with social skills referring to the specific behaviors that an individual exhibits in order to perform competently on a task, while social competence forms an evaluative term based upon judgements that an individual has indeed performed a given task in accordance with prescribed criteria. Thus, specific behaviors may be considered to be socially competent if they predict important social outcomes for individuals (Gresham, 1983). As further indication of the inherent links between the two concepts, Reschly and Gresham (1981) conceptualized social competence as consisting of two components: adaptive behavior, which includes independent functioning skills, physical development, language development, and academic competencies; and social skills which include 'interpersonal behaviors' such as accepting authority, conversation skills, cooperative behaviors, 'self related behaviors' such as expressing feelings, ethical behavior, positive attitude toward self, and 'task related behaviors' such as attending behavior, completing tasks and following directions.

The Importance of Social Competence and Social Skills

Despite the absence of widely accepted definitions of either social competence or social skills within the literature, the importance of their acquisition for successful student development is generally endorsed (Cartledge & Milburn, 1986; Gresham, 1981; Walker & Hops, 1976). From a broader perspective, it has been suggested that social skills remain of critical importance for both the current functioning and future development of the student, with the absence or presence of such skills playing a vital role in the individual's acquisition of social, cultural and ultimately economic 'success.'

The Determination of Desirable Social Skills

As an extension of the problems of definition, the determination of specific facets of student social competence, that is particular social skill elements, similarly remains problematic. In the determination of such skills, three broad structural influences have been identified and called upon by a variety of authors to add clarity to their practical definition: learner characteristics; social and cultural milieu; and, the findings of academics and practitioners in the field. A further complicating factor is the differential assessment of desirable social skills by adults and children (Cartledge & Milburn, 1986).

The focus on learner characteristics implies an implicit view of social skills within a broader development context. The specific developmental theories suggested as being appropriate in determining the development and presentation of particular social skills include those of Freud, Erikson, Piaget and Kohlberg (Cartledge & Milburn, 1986), theorists whose ideas and concepts are well established within the educational literature. The framing of social skill acquisition within this developmental model points to the need for normative guidelines that delimit both the rate of social development deemed satisfactory, as well as the range of skills considered appropriate for particular levels of development.

In addition to learner characteristics, the social and cultural context of social behaviors has also been identified as an important element in the selection of appropriate social skills. Cultural differences, for example, dictate accepted norms of behavior that vary both from situation to situation as well as over time (Bornstein, Bellack & Hersen, 1977).

While adults, specifically teachers, may value skills that relate primarily to order such as cooperative behavior, following rules and directions, students focus more on friendliness, sociability and being "good company." Given the wide range of potential social skills which may be considered appropriate within a particular context, Allyon and Azrin (1968) advocate use of "the relevance of behavior rule" which recommends that teachers focus on "only those behaviors that will continue to be reinforced after training." In focussing the determination of desired social skills, this 'rule' suggests the focus on skills that have some intrinsic value to the student, some benefit to the student, and which may further be valued by others in the student's environment.

The Measurement of Social Competence

The difficulty of defining and conceptualizing social competence, as well as listing desirable social skills is further reflected in the subsequent efforts of researchers to measure or assess student development across these complex domains. Despite the complexity and challenge of assessment, however, it, nevertheless, forms an integral component of the instructional process given its potential to reveal not only the students' rate of development within a specified area, but also to highlight potential contributing factors to this development (Mager & Pipe, 1970).

Problems in Measurement

The findings of the literature reveal three major problems that must be addressed in the accurate assessment of student social competence: validity, reliability and

practicality. In regard to validity, the assessment process must include some mechanism or strategy to assess both the student's knowledge of a specific behavior or skill as well as the ability to perform it. Bandura (1977), for example, suggested that children may possess some cognitive understanding of desirable social behaviors within a given situation, but may still be unable to translate these into specific actions.

In terms of reliability, the literature highlights the need to recognize that differences of 'opinion' may influence both the collection of data as well as its subsequent assessment. Numerous sources of data are outlined in the literature that may be called upon to assess the competency of a student's social behavior: for example, parents, peers, teachers and the student him or herself. Research findings indicate, however, that there is commonly a lack of agreement between these different sources (Cartledge & Milburn, 1986).

In addition, further variations are commonly reported in the determination of what may be considered acceptable behaviors. This second lack of consensus impacts upon both the determination of when a behavior should be taught, and the definition of criteria for the mastery of a specific social skill.

The problems of validity and reliability in the assessment of student social competence suggest the need for multiple methods of assessment rather than the reliance on any one single measure, supported by assessment input from a variety of souces. Ollendick and Hersen (1984) further cautioned that any strategy for assessment must also include "multiple targets of change," that is, overt behaviors, effective states, and thoughts or cognitions, given the contribution of each of these to student social competence.

In addition to theoretical problems relating to validity and reliability, any strategies selected must also be practical within the school context. Different assessment strategies demand varying amounts of time, trained personnel, resource materials, administrative capabilities and analysis. Before any assessment takes place, a careful review must be made to ensure that adequate resources are available for its successful implementation and completion.

Social Competence Assessment Strategies

Cartledge and Milburn (1986) defined five critical factors in the selection of any assessment strategy: the nature of the behavior assessed; the target of the assessment (ie., an individual student or group of students); the availability of assessment resources; the availability of informants knowledgeable about the student; and the student's developmental level.

Gresham and Elliott (1984) conceptually arranged the variety of assessment strategies available into two basic categories: selection/diagnostic measures, and intervention/therapy measures. Selection or diagnostic measures provide information that may be valuable in determining the presence of a social skills deficit. The varied strategies suitable for this type of assessment include the reliance upon sociometrics, behavior checklists and teacher/parent ratings, student self reports and behavioral role play tasks.

Intervention or therapy measures form a basis for planning and evaluating interventions, and provide information that may be examined for insights into a

student's behavior. The particular assessment strategies that provide this type of information include interviews, naturalistic observations, and student self-monitoring.

In the assessment of student social competence across these two broad classifications, a further structural distinction may be drawn between strategies contingent upon the use of adults knowledgeable about a student - generally a teacher or parent - and assessments that rely on peer or self evaluation approaches.

Assessment by Adults - The assessment techniques most commonly used that rely on knowledgeable adults include behavior checklists and rating scales, observations of student performance, interviews and, analogue or behavioral role playing. Within these four strategies, the preliminary step in the assessment process is frequently the use of some form of rating scale or checklist.

The literature cites teachers as the response group most commonly selected to complete the instruments, with teacher ratings considered comparable with alternative assessments of student social competence (Cartledge & Milburn, 1986; Greenwood, Walker & Hops, 1977). Parents are also commonly used as sources of assessment data, although the research suggests some problem of reliability with parents under reporting and over reporting student social competence (Beck, 1986).

Assessment by Peers - In addition to parents and teachers, peers are a further source of data on student social competence. Sociometric approaches form the basis of the majority of peer-focussed assessments, although the individual strategies used vary (Hops & Lewin, 1984; Hymel, 1983). Disadvantages of sociometric approaches include a lack of demonstrated reliability with very young students, and the impracticality of instrument administrations.

Self Assessment - Finally, the research points to the value of including the student him or herself as an integral component of the assessment process. Student involvement may be secured through the use of various scales, checklists and self-monitoring techniques which provide a basis for comparing student responses with those of other raters (Michelson et al, 1983).

Conclusions on Assessment

Based on the complexity of the concept measured, the literature reveals that no one measurement strategy may be considered the best method of assessment for all social skills in all contexts. Rather, there is a need to introduce a series of different procedures that use more than one informant, incorporate more than one assessment setting, and include reference to observable behaviors as well as cognitive and affective dimensions. Individual assessment procedures may be most effective as part of what Michelson et al (1983) referred to as a Comprehensive Assessment Strategy.

Chapter Three

Research Design

The development of an approach for the reliable, valid and practical measurement of student social competence, was completed in a series of stages. Three major stages defined the research process: an initial review of the literature on social skills, their nature and assessment - allied with the development of a conceptual framework in which to ground any discussion of social competence; the identification of suitable instruments for the measurement of social competence based on available tools and instruments and their preliminary field testing; and, the development of a comprehensive approach to the measurement of social competence supported by subsequent pilot testing.

The Conceptualization and Measurement of Social Competence

Two major initiatives formed the basis of the first phase of the research: first, the development of a substantive literature review on the nature and assessment of student social skills/competence; and second, the preliminary conceptualization of a framework for the discussion, definition and ultimately the measurement of social competence.

The starting point for the research project was a comprehensive literature review, commissioned by the school district, which addressed the varied issues relating to the nature and assessment of student social skills, and as an extension of these, social competence. The findings of the review indicated that within the educational literature precise definitions, or definitive listings, of social competence and desirable social skills were not readily apparent, nor universally available. Rather, the literature reviewed presented competing or even contrasting definitions of what should and should not be included within each. Similarly, the review of strategies for the subsequent assessment or measurement of student social competence, revealed a further diverse array of primarily quantitative measurement systems, which relied on varied forms of data, collected and analyzed in numerous ways, from a diverse range of sources.

In their subsequent discussions of the findings from the literature review, the study team addressed the problems presented by the diversity of social competence definitions, as well as the variety of measurement strategies proposed to measure student social skills. As a basis for this review the study team focussed on the development of a conceptual model of social competence that would provide a framework for the identification of appropriate social skills, as well as guidelines for their subsequent measurement based on outcome definitions. The initial discussions centered upon the identification of desirable social skills and resulted in a substantial list of such skills. Subsequent discussions revealed the need to frame these listings of skills within a broader conceptual model that considered the situations in which skills were needed, how the skills were processed, and the identifiable desired outcomes. The result was the adoption of a systems framework for the discussion and conceptualization of social competence that drew primarily on the work of Worthen and Saunders (1987).

The conceptualization of social competence within a systems framework resulted in the identification of three major facets of the concept: social skills, social information processing and socially desirable outcomes. These initial three facets of the social competence model were further rationalized as operational within a situational context which, emerged as a further dimension that would also need to be considered.

Given the preliminary definition of social competence, and the identification of a broader system framework in which to approach its teaching and measurement, the study team addressed the specific task of developing an assessment methodology for measuring and reporting student social competence. Drawing on the findings of the literature review, which indicated the complexity and time-consuming nature of developing reliable and valid social skill measurement and reporting systems, the study team decided to examine existing social skills measurement instruments to determine their appropriateness for use in the Fort McMurray context. Potential instruments were reviewed which fit the following criteria:

1. The instrument focussed on students in regular classrooms.
2. The instrument accommodated a variety of developmental levels, largely defined as Divisions I, II, III, and IV.
3. The instrument included a variety of sub-scales and items which addressed the social response areas identified, and had the potential for revision to meet the requirements of the team's particular needs.
4. The instrument focussed on positive social behavior, as opposed to negative social behavior, or lack of social behavior.
5. The instrument included variations pertinent to the various audiences who might be asked to respond such as parents, teachers and students.

Two instruments were identified through the review process both of which were considered by the study team to have potential for the assessment of student social skills, particularly perceptions - the *Self-Perception Profile for Children* (1985) and the *Self-Perception Profile for Adolescents* (1988) both developed by Susan Harter. Subsequent consultations with the author confirmed the potential of both instruments for use as part of the research project given their capacity for addition and subtractions, as well as their inclusion of norms established for Alberta. A third instrument, the *Teacher Rating of Social Skills - Children* (TROSS-C) developed by Clarke, Gresham and Elliott (1985), was also identified as an appropriate measure for observations of student behavior. The TROSS-C was revised by Gresham and Elliott (1990) based on further development work, and renamed the *Social Skills Rating System* (SSRS). The revisions to the instrument did not substantively alter its form or content.

As a further assessment of their suitability, the selected instruments were cross-referenced to the desired social outcomes developed as part of the model of social competence (Table 1). The results of this cross-referencing exercise showed that the instruments could provide good coverage of the theoretical construct.

Table 1

Cross-Referencing Social Outcomes and Assessment Instruments

Desirable Social Outcomes [1]	Instruments
1. BEHAVIORS:	
1.1 basic interaction skills	1.1 SSRS [2] (Social Initiation)
1.2 coping skills	1.2 TROSS-C [3] (Academic Performance, Peer Reinforcement, Cooperation)
1.3 responding skills	1.3 TROSS-C (Peer Reinforcement, Academic Performance)
1.4 classroom/academic skills	1.4 TROSS-C (Academic Performance)
2. PERCEPTIONS:	
2.1 goals/motivation/needs	2.1 SPP [4] (for Adolescents - Job Competence, Romantic Appeal, Friendship)
2.2 appearance	2.2 SPP [5] (Physical Appearance)
2.3 self-esteem	2.3 SPP (Self-Esteem)
3. SOCIAL APPROPRIATENESS:	
3.1 acceptance	3.1 SPP (Social Acceptance)
3.2 behavior conduct	3.2 SPP (Behavior Conduct)
3.3 positive reinforcement	3.3 SPP (Peer Reinforcement)

1 Appropriate desirable social outcomes at various developmental levels and as outlined in the Alberta *School Act* (1988) and the *Guide to Education* (1989).

2 *Social Skills Rating System* (Gresham & Elliott, 1990).

3 *Teacher Rating of Social Skills - Children* (Clarke, Gresham & Elliott, 1985).

4 *Self-Perception Profile for Adolescents* (Harter, 1988).

5 *Self-Perception Profile for Children* (Harter, 1985) and *Self-Perception Profile for Adolescents* (Harter, 1988).

Field Test of Standardized Measurement Instruments

As the second phase of the project, the three instruments, identified through the review of existing standardized measurement tools, were field-tested in the fall of 1990. Field testing was deferred until November to allow teaching staff time to get to know their students sufficiently well before administration of the instruments. The major objectives of the field test were to confirm the quality of the data gathered by the instruments, and to review the ease and practicality of instrument administration. The appropriate SSRS instrument was administered to a grade 3 class and a grade 11 (semestered) class; the SPP-C to a grade 6 class and the SPP-A to a grade 11 (semestered) class. Prior to the field test of the instruments, teachers at the individual testing site were given a brief overview of the purpose of the study, as well as a summary of the instruments to be used. As part of the instrument administration, teaching staff were asked to complete one form for each student, have the student complete one, and have the parent complete one. One follow-up was completed for parents who did not return the forms. Once the completed forms were returned from the three groups of participants, an integrated analysis was completed for each student in the sample.

Completed assessments (teacher, student and parent instruments) were collected for 34 of the 84 students assessed (a completed sample of 40 percent). Two major problems were identified through the administration: training in test administration for teachers, and ease of instrument administration. Teachers reported that they felt uncomfortable both in administering the instrument, and in analyzing and interpreting the results. They further identified some potential suspicion and antagonism among parents relating to the process. Teachers suggested the need for the introduction of comprehensive training sessions if the instruments were intended to become a standard component of student assessments. Teachers did acknowledge, however, the value of the information gathered by the individual instruments.

The administrative aspects of the instrument were further highlighted as problematic. Teachers deemed administration difficult because of the amount of time involved for each teacher both in assessing individual students, as well as ensuring parent returns. For the field tests, parental returns were low (34 out of a possible 84) with five outright refusals. Teachers also reported that the administration of the instruments in a semestered high school in November, was too early in the school term for them to make informed assessments of students' social skills.

Based on the results of the field test of these three instruments, all three were considered "impractical" for use with whole classes as part of a universal process of student social competence assessment and reporting - although their use with smaller groups of students was considered feasible. In their discussions of the field test, teachers suggested the development of a simpler-to-administer Social Competence Checklist, with the use of commercial tests by counsellors as a "back-up" to the simpler checklist, and it was to this strategy that the project team turned next.

The Development of a Comprehensive Approach to the Measurement of Student Social Competence

Based on the results of the field testing of the commercial instruments, as well as the subsequent discussions that followed, a three-level approach to social competence assessing and reporting was developed and prepared by the project study team. The approach was consistent with the need for an assessment process that was both practical to administer and yet generated valid and reliable information. The approach developed was designed to proceed from a general to a more specific level of assessment, with the particular level of assessment contingent upon the individual needs of the student, parent or teacher.

The approach developed (described in detail in Chapter Four) included the universal assessment of student social skills by teachers and their subsequent reporting on student report cards; the introduction of a second level of assessment using a purposely developed *Social Skills Diagnostic Screen*; and the design of a third level, implemented only when a detailed knowledge of the students' social development was required that used a battery of standard assessment instruments similar to those field tested as part of phase two.

Field Test of the Social Skills Diagnostic Screen

The bulk of the third phase of research activities were targeted at assessing the validity and reliability of the proposed *Social Skills Diagnostic Screen* developed for use as the basis of the second level of the approach, as well as the broader application of the three level approach to assessing student development. The *Social Skills Diagnostic Screen* developed from a series of social skill checklists prepared by the project study team, designed to help teachers and parents more easily identify children's level of social skills, and based on the same criteria to which the standardized instruments had been originally cross-referenced.

The field test of the *Social Skills Diagnostic Screen* was completed in three phases: a primary field test, and detailed pre- and post-tests conducted in conjunction with the introduction of specific teaching interventions and strategies to address student social skill deficits.

The primary field test of the screen was completed during the second year of the project to determine the general statistical validity and reliability of the instrument. Forty-nine students were assessed using the screen. Of the 49 students, 40 were regular classroom students chosen at random from class lists which included eight students in each of ECS (Kindergarten), grades 3, 4, 6 and 9 classrooms. Of the remaining nine students, three were students who were previously identified as having social skills deficits and were participants in a District Social Skills Acquisition Program. The final six students were Native children between 8 to 15 years of age, whose parents had volunteered their participation.

Copies of the screen were delivered to parents and teachers; and administered in interview format to students in grades 1 to 3, and in small groups to students in grades 4 and up. Peer assessments for the Native students was completed using two peers, one Native and one non-Native. Anonymity and honesty were stressed throughout screen administration, with consistent use of terminology and the provision of explanations.

The results of the preliminary field test were analyzed to determine mean instrument scores across different student groups and across different raters, as well as the reliability and validity of the screen.

The mean student scores were calculated by rater (ie., peer, teacher, student, parent and composite scores); by sex of student; by grade of student and for Native students. Mean scores across raters and student groupings revealed some significant differences between groups. Female student means, for example, were consistently higher than male student means, while means by parent raters were marginally higher than those of other raters for the first sections of the screen.

The inter-rater reliability of the screen was determined through a question-by-question analysis of response agreement between raters. Correlation coefficients of inter-rater reliability ranged from .43 between student and teacher raters to .63 between peer and teacher. Correlation coefficients between rater and the mean ranged from .77 for students to .87 for peers.

The content validity of the screen was examined through a review of the aggregate score ranges of the screen, initially identified as Well Developed (151+), Developing Appropriately (100 - 150) and Requiring Assistance (40 - 99) (Maximum possible score was 220). Only one student in the sample scored below 100 points on the screen, 17 students between 100 to 150 points and 31 over 151. The field test sample mean score was high at 159.5 falling within the Well Developed Range. Screen scores for the three skill deficient students included as part of the field test were, however, significantly lower than the remainder of the sample (two standard deviations below the mean). Nevertheless, the results of the field test suggested the need for further investigation of the **a priori** defined aggregate range categories, given the failure of the screen to distribute students among the three categories.

In addition to a review of aggregate mean scores, question by question response analysis identified five questions that required some rewording or vocabulary refinement to address potential problems of ambiguity. One final question was further identified as requiring total revision or withdrawal based on a perceived lack of relevance by raters.

Based on the results of the field test, the *Social Skill Diagnostic Screen* was considered a potentially useful component of the broader assessment approach. The screen was further considered as a possible base document for discussion between parents and teachers regarding students' social skills development. It was agreed, however, that further testing of the screen was required to confirm its validity and reliability as a measurement instrument, as well as its value within a three-level approach to social skills development. Pilot testing of the screen and the three-level approach was scheduled for the 1991 - 1992 school year.

Pilot Test of the Screen and Three-Level Approach

The pilot test of the *Social Skills Diagnostic Screen* and the three-level approach to measuring social skills was completed in the 1991 - 1992 school year. The selection of subjects for the pilot test was initiated during the first reporting period in November 1991. An ECS to grade 8 school was identified for the pilot test of the screen and approach.

An inservice outlining procedures for the pilot test was completed with teachers at the school in the fall of 1991, by one member of the project study team.

The pilot test of the screen and approach was structured along pre- and post-test guidelines. An initial pre-test was administered in January 1992, with post testing completed at the end of April 1992 and beginning of May. The objectives for the first phase of the pre-test were:

1. to investigate the effectiveness of the screen as a basis for parent-teacher interviews and as a basis for determining social skill level in reporting procedures;
2. further testing of the screen in areas of possible age or sex bias, ambiguity or problems encountered with any specific question, and numerical scoring for student diagnostic categories;
3. further testing of the content validity of the screen; and
4. further testing of the reliability of the screen.

The major objective of the post-test was the retest of students who participated in the January 1992 pre-test with a focus on:

(a) the test-retest reliability of the screen;
(b) the effectiveness of small group interventions on student social skill development; and
(c) the review of any additional factors affecting test scores

For the selection of the pilot test sample, each teacher, grades 1 to 8, was asked to identify six students per class on the basis of the following social skills development categories: two who were 'well developed,' two 'developing appropriately,' and two who 'required assistance' in social skill development. Each teacher then completed the diagnostic screen for each of these students, and was further asked to use the screen as the basis for discussion at parent-teacher interviews. Parents were also asked to complete the screen for each child, and during the second week of January 1992, a consultant administered the screen to each student. Students designated as skill deficient were also given the *Social Skills Rating System* (Gresham & Elliott, 1990) test to provide a criterion for the assessment of the concurrent validity of the screen. Input on the effectiveness of the screen as a basis for parent-teacher interviews was also gathered.

Mean scores were calculated for the instrument based on type of rater (student, teacher, parent), and student groupings (well developed, developing appropriately, and requiring assistance). The reliability of the screen was assessed through the calculation of inter-rater reliability coefficients, while the validity of the screen was assessed based on the ability of the screen to distinguish students according to their social skill level (content validity), as well as through the comparison of skill deficient student scores on the screen with those achieved by the same students using the *Social Skills Rating System* test (concurrent validity).

As the basis for the post-test, all students in the requiring assistance group were targeted for small group (three to four students per group) interventions by the school counsellor. The interventions consisted of one 45 minute session per week over a six-week period. During these sessions, the students received specific social skills training from the school counsellor. The counsellor used the *Social Skills Development Activity Manual* (Sherman, 1991) as a basis for the interventions.

The manual was developed specifically to be used in conjunction with the *Social Skills Diagnostic Screen*, and includes a series of strategies and teaching scenarios cross-referenced to the specific categories and skills contained in the screen.

The post-test was administered at the end of April through to the beginning of May 1992. Consistency in administration was achieved through the use of the same consultant, and the same administration procedures. A total of 72 teacher and 72 student screens were returned, as well as 68 parent screens. Four parent screens were not received, all of which were for students in the requiring assistance category.

Means were once again calculated for raters and student groups. In addition, further statistical tests of screen validity and reliability were completed. As part of the pre-and post-test data analysis, t-tests were completed to determine the reliability of the screen over time as part of a test-re-test administration.

Chapter Four

Measuring Social Competence

The major objective of the project was to develop a set of social skills, behaviors and attitude indicators and standards that could be used to assess the quality of a selected portion of the jurisdiction's educational program and delivery. The result, after three years of work, was the conceptualization of an expanded systems model of social competence, and the development of a three-level approach to the measurement of social skills that included the *Social Skills Diagnostic Screen.*

A Model of Social Competence

The model of social competence developed by the project study team was based on a systems perspective based of a modified CIPP (Context, Input, Process, Product) Model after (Worthen and Sanders, 1987, p. 78) (Figure 1).

A systems perspective was selected as the basis for conceptualizing social competence given both the findings of the literature review on social skills, their nature and assessment, as well as the results of the preliminary discussions held by the project team on the concept of social competence. A systems perspective proved compatible with the diverse beliefs of the study team, and further appeared the most likely to provide good information for program development and subsequent student evaluation relating to social competence.

The conceptual model of social competence developed included four inter-related components: social situation (context), social information (knowledge, skills and attitudes), social information processing, and social outcomes.

Social Situation (Context)

The social situation component of the model was conceptualized to include three elements: an audience factor, a task-related factor, and an environmental factor. The audience factor was defined as those individuals in receipt of the responses or conduct of a respondent. Potential audiences were considered to include peers, teachers, parents or significant others (significant others may include older or younger children or significant other adults). In general, audiences are required to act in such a fashion that the respondent deems the responses to have been accepted, reinforced, or generally viewed as appropriate. The task-related factors were derived primarily from work of Reschly and Gresham (1981). Examples of task-related behaviors include attending behavior, completing tasks and following directions. More specifically, with task-related behaviors restricted to in-class activities, a skills list might include such things as producing correct work, ignoring distractions, and putting things away properly. Environmental factors were used to define situations in which respondents might find themselves. In broad terms, those situations were defined as familiar/unfamiliar or friendly/hostile.

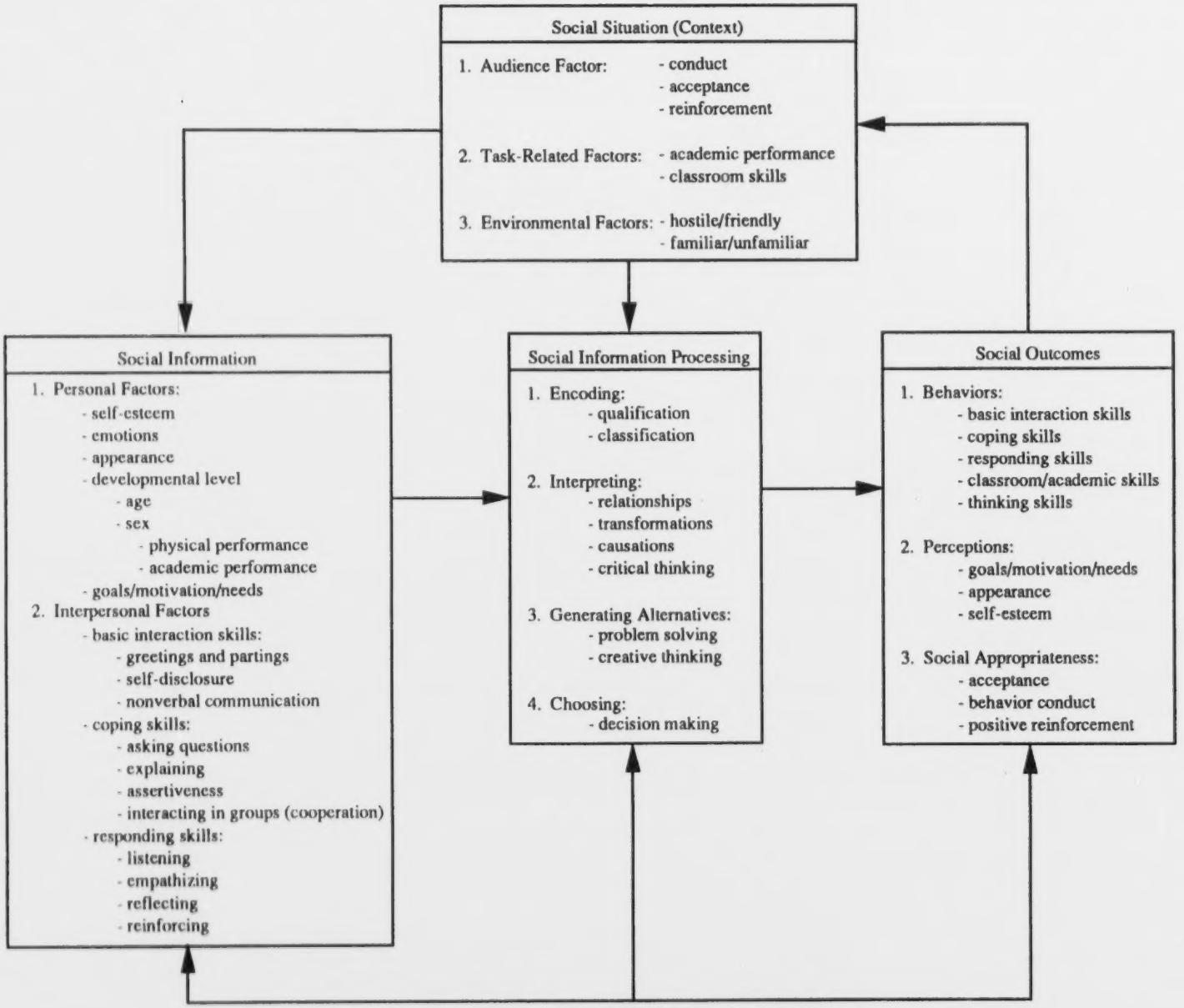


Figure 1: A Systems Model of Social Competence

Social Information (Knowledge, Skills and Attitudes)

The social information component of the model also drew on the work of Reschly and Gresham (1981) who conceptualized social competence as being composed of two components: adaptive behavior and social skills. Social skills were further refined to produce three categories: interpersonal behaviors, self-related behaviors and task-related behaviors. As previously noted, task-related behaviors were considered to be most closely related to the social situation dimension of the construct. Examples of interpersonal behaviors include accepting authority, conversation skills, cooperative behaviors and peer relationships. Self-related behaviors were conceptualized as personal behaviors and considered to include the expression of feelings, ethical behavior, and a positive attitude toward self.

To more substantially define the concepts of personal behavior and interpersonal behavior for both teaching and assessment purposes, the personal factor was further expanded to include self-esteem, emotions, appearance, developmental level and goals/motivation/needs. The concept of self esteem as defined by Harter (1985), represents a global judgement of one's worth as a person. Emotions were defined as the feelings of individuals. Appearance was also considered an important element of social interactions.

Developmental level was rationalized to include the concepts of age, gender, language development and physical development. For practical purposes, developmental levels were defined as Divisions I, II, III and IV paralleling the levels of the school system. The major premise underlying the concept of developmental level was that age also influences judgement. There are broad societal expectations relating to behavior and age. Subjects who behave in a manner that is considered either 'too young' or 'too old' are deemed to be acting essentially in an inappropriate fashion. To some extent, gender is also important. Sexual stereotyping aside, there are occasions when specific behaviors are expected that are gender specific. While this may be viewed as sexist, there are culturally influenced 'norms' for male and female behavior, although these are subject to change over time.

As a final dimension of personal factors, the goals that an individual may have, and the nature of their motivation were considered important influences on behavior. Individuals interpret the behavior of others based on their own goals, and further make judgements based on the goals that they believe others are attempting to achieve. The violation of this mutual interpretation is embodied in the term 'hidden agenda,' where individuals are upset when they find out that the goals and motivations of others are not what they expected.

The interpersonal factor is composed of three sub-areas: basic interaction skills, coping skills and responding skills. Hargie and McCartan (1986) identified basic interaction skills as greetings/partings, or more generally 'making conversation'; self-disclosure; and non-verbal communication.

Greetings and partings may be subdivided into a series of skills and activities which Hargie and McCartan (1986, p. 153) defined as core social skills. Self -disclosure is defined as "...giving opinions, relating feelings and making statements about a wide variety of topics; in other words, making disclosures." (p.143). Disclosures may be either subjective, or objective. Subjective disclosures are defined as self-disclosures, and may be either verbal or nonverbal. Self-

disclosure is considered an important social skill since it is one way in which individuals come to know other people better. In the use of this skill, Hargie and McCartan identified six important subskills:

1. the total number of disclosures made;
2. the depth of the disclosures;
3. the content of the disclosures in different settings;
4. the nonverbal as well as verbal component;
5. the rewarding of disclosures; and
6. the reciprocal nature of disclosures. (p. 153)

A third basic interaction skill defined by Hargie and McCartan, is nonverbal communication. The significance of this skill may be related to dominant conveyance of social meanings nonverbally. Nonverbal communication may be defined as all forms of communication other than verbal communication. In general, it incorporates body language which includes "...body contact, proximity, orientation, posture, body movements, gaze, facial expressions and appearance." (p.161)

The second major interpersonal skill area defined is that of 'coping skills.' Hargie and McCartan (1986) identified four specific coping skills: questioning; explaining; assertiveness; and interacting in groups.

Questioning is an important technique for opening and maintaining conversations with others, while explaining allows the individual to communicate clearly their thoughts, ideas, beliefs, and experiences. Assertiveness allows the individual to act in his or her own best interests without denying the rights of others, while interacting in groups refers to skills required to work cooperatively, share with others, tolerate differences and arrive at acceptable compromises.

The third interpersonal area identified by Hargie and McCartan (1986) is responding skill. The key responding skills are defined as: listening; empathizing; reflecting; and reinforcing.

While there are various definitions of listening, for the purposes of this study effective listening involves an active process of hearing a sound allied with the perceptual processing of data so that the individual is able to receive information, assimilate it and, in turn, respond accordingly. This is an active process of listening. Empathizing is defined as: "...the ability to enter into, or share in and comprehend the momentary psychological state of another person...", while reflecting is "...a process of mirroring back in the interviewer's own words, the essence of the interviewee's previous statement (p. 209). Reflecting may be of two different types: reflection of content (ie., paraphrasing) and reflecting of feeling. The primary distinction between the two is one of emphasis.

The final key responding skill is that of reinforcement, wherein the behavior of individuals is either rewarded or punished. Positive reinforcement may occur through such things as statements of agreement, head nodding, or such other stimuli. Negative reinforcement may eventually lead to extinction of the behavior. Social reinforcers are defined by Hargie and McCartan (1986) as those behaviors displayed during the normal course of interaction which increase the frequency to improve the quality of a social behavior. Such reinforcing behaviors may be either verbal or non verbal. (p. 214)

Social Information Processing

Social information requires some form of processing, and may be related to what Reschly and Gresham (1981) described as adaptive behavior. Adaptive behaviors include independent functioning skills, physical development, language development and academic competencies. Within the social competence model, these adaptive behaviors were cross-referenced to other aspects of the model. Language development and physical development were considered sub sets of the input variable of developmental level, while academic competency was defined as a contextual factor. The remaining adaptive behavior process of independent functioning skills was refined through a review of literature on cognition, decision making and problem solving. Through the review, Perry and Perry's (1987) application of Dodge's Social Information Processing Model of Social Competence was discovered, and considered a suitable framework for the review of cognitive processing.

The model identified as a suitable definitional framework details the four cognitive steps consistent with children's appropriate and competent action in social situations: encoding social cues; interpreting behavior; generating alternative responses; and choosing a response after evaluating potential, consequences of alternatives, and performing the chosen response.

Perry and Perry (1987) defined the encoding of social cues as the search for relevant social information before responding. Interpretation involves giving meaning to the cues intended. The response search (generating) generates various possible behavioral responses to the situation at hand, and these responses can vary in quantity as well as quality. The response decision (choosing) involves choosing a response after evaluating the potential consequences of each possible response.

While the conceptualization of "processing" appeared reasonable, additional detail was sought to better define and clarify the nature of the various sub-processes. As part of this review, Presseisen's (1987) three level model of thinking was reviewed. This model defines thinking in the areas of cognition, metacognition and epistemic cognition. For the purposes of the current study, the cognitive processes appeared most relevant.

Within the Social Competence Model, Dodge's processing model was, therefore, expanded using Presseisen's model of thinking. Encoding was considered to include the two basic cognitive processes of qualification and classification. Qualification involves finding unique characteristics while classification determines common qualities. The interpreting process was deemed to include the basic thinking processes of relationships, transformations and causation. Relationships involve detecting regular operations. Transformations involve relating known to the unknown and creating new meanings, while causation involves establishing cause and effect, and interpretation. In addition, the complex process of critical thinking, which involves the understanding of particular meanings, was deemed to be supportive of the interpreting process. Dodge's process of generating alternatives was expanded by Presseissen's complex processes of problem solving and creative thinking. Problem solving involves the resolution of a known difficulty and creative thinking involves the creation of novel ideas or products.

The social processing category of choosing, was related to Presseisen's complex thinking process of decision making. The final area of Dodge's social information processing model, defined as enactment, was removed as a process and considered part of the social outcomes or social behaviors subsystem.

Social Outcomes

The definition of *social outcomes* was problematic since they needed to be acceptable as norms of social behavior across and within a variety of different groups in society. Therefore, it was decided to adopt the social outcomes or norms identified as desirable within Alberta and specified by the province in the Alberta *School Act* (1988) and in the *Guide to Education* (1989).

The *Alberta School Act* (1988: Section 7 p. 11) specifies a code of conduct:

A student shall conduct himself so as to reasonably comply with the following code of conduct:

a. be diligent in pursuing his studies;
b. attend school regularly and punctually;
c. cooperate fully with everyone authorized by the board to provide education programs and other services;
d. comply with the rules of the school;
e. account to his teachers for his conduct;
f. respect the rights of others.

In addition, further desirable personal characteristics, outlined by Alberta Education in A *Guide to Education* (1989), were also incorporated into the model and categorized into three areas: a. ethical/moral characteristics; b. intellectual characteristics; and c. social/personal characteristics.

The ethical/moral characteristics include respectful, responsible, fair/just, tolerant, honest, kind, forgiving, committed to democratic ideals and loyal. The intellectual characteristics include open-minded, thinks critically, intellectually curious, creative, pursues excellence and appreciative. The social/personal characteristics include cooperation, accepting, conserving, industriousness, the possession of strong sense of self-worth, preserving, promptness, neatness, attentiveness, unselfishness, and the maintenance of mental and physical fitness.

The various categories, as outlined by the Alberta *School Act* (1988) and the province in the *Guide to Education* (1989), were considered broad and general. Some characteristics were of a perceptual nature, whereas others implied a requirement for certain behaviors or actions. Therefore, the desired social outcomes were reclassified as behaviors or as perceptions. Since the social outcomes area forms a summation of both action and perception related to all aspects of the model, the requisite outcomes for an individual form a summary of the more complete model. Appropriate behavioral outcomes for a socially competent individual would include the basic interaction skills, responding skills, coping skills, classroom/ academic skills and thinking skills. Perceptual outcomes would include goals/motivation/ needs, appearance, self-esteem, acceptance, reinforcement, conduct. Each area has been more completely defined or described in previous sections. The relationship between the provincial definition of desired social outcomes and the labels used in the social competence model are summarized in Table 2.

Table 2

Cross-Referencing Social Competence Model Social Outcomes to Alberta Education's Desirable Personal Characteristics

Social Outcomes	Alberta Education's Desirable Personal Characteristics
1. Behaviors:	
- Basic Interaction	
- Responding	
- Coping	- tolerant, forgiving, honest democratic ideals, unselfish cooperative, accepting
- Classroom/Academic Competence	- respectful, neat, prompt, attentive, industrious
- Thinking	- open-minded, critical thinking, mentally fit, creative, intellectually curious
2. Perceptions:	
- Developmentally Appropriate Behavioral Conduct	- responsible
- Goals/Motivation Needs	-
- Self-Esteem	- sense of self-worth
- Appearance	- physically fit
- Peer Reinforcement	- fair, appreciative
- Social Acceptance	
3. Not addressed:	
	- kind
	- loyal
	- persevering
	- conserving
	- pursues excellence

Summary of a System Model of Social Competence

The Social Competence Model developed remained fundamentally grounded in a systems framework.

The model drew on particular research-based ideas regarding the concept of social competence (Hargie & McCarten, 1986), and the factors which influence an individual's social interaction skills (Perry & Perry, 1987; Reschly & Gresham, 1981). The social outcomes considered desirable were those outlined in the 1988 Alberta *School Act* and in the 1989 *Guide to Education*. Based on the varied links between the inter-related sections of the model, socially competent responses or behaviors would be predicated upon the ability of the individual to process social knowledge, skills and attitudes and respond in ways considered appropriate for a particular social context. Students perceived and received positively by the respondent, would, thus, be considered socially competent.

A Three-Level Approach to Measuring Student Social Skills

The initial conceptual review of student social competence, allied with the field test of standardized social skill measurement instruments during the initial phase of the project, suggested the need for the development and implementation of a comprehensive approach for the assessing and reporting of student social skill development. Specifically, the field test of standardized instruments revealed the need for a multilevel approach that would enable both general and specific information to be gathered as the need of students, parents and teachers dictated. Further, the dual needs for any assessment approach to be both practical and easy to administer remained of paramount importance. In response to these specific needs, allied with preliminary project findings, a three-level approach to social skill assessment was developed.

Level One

As part of the first level of student social skill assessment, each teacher reports to parents, at report card time, on the social development of their children. Students are rated by the teacher across four major domains of social skills drawn from the conceptual model of social competence: Personal factors; interpersonal factors; social reasoning skills; and classroom behavior. For each of these four areas, students are rated by the teacher as being well developed, developing appropriately, or requiring assistance.

To accommodate these changes, the existing portion of the report cards in which teachers comment on a student's social skill development was revised to reflect a more detailed and valid assessment of student social skills based on research findings. (See Appendix Two for a copy of School Report Cards for ECS; grades 1, 2, 3; grades 4, 5, 6; and grades 7, 8).

Level Two

The second level of the assessment approach was designed for use when any student, parent, or teacher identified the need for a more detailed assessment of a student's social skill development. In these cases, the district's *Social Skills*

on the student's level of social skill development. Initially, the screen may be completed by the teacher for use in developing a social skills rating for the report card, as a basis for discussion with parents and/or the student, or for developing a moderate program of remedial action to address social skill deficits. Additionally, the screen may be completed by the student, the parents, and a peer, and the results collated to provide a composite student profile which may serve as a basis for further discussion. Chapter Five describes the *Social Skills Diagnostic Screen.*

Level Three

As the final level of the approach, level three is designed for use only in situations in which a detailed knowledge of the student's level of social development is required. In these exceptional cases, students may be referred to the school counsellor for further assessment, allied with the development of an Individualized Program Plan that addresses the review of appropriate and acceptable social behavior. The specific battery of standardized assessment instruments used as part of this third level of assessment may include the *Social Skills Rating System* (Gresham and Elliott, 1990), field-tested as part of the early project research, and the *Self-Perception Profile for Adolescents* (Harter 1985). As the most intensive, and specific level of assessment, this final level of the approach is designed for use only in isolated cases.

Summary of the Three-Level Approach to Assessment

The assessment approach developed included three levels of assessment, a structure that was consistent with the need for an assessment approach that was practical, easy to administer, and capable of generating quality information. The three-level approach moved from the general to the specific. Level one utilized student report cards as a framework for reporting on student social skills, level two included a specially developed assessment screen, the *Social Skills Diagnostic Screen*, while level three incorporated standardized commercial instruments. Preliminary field testing of the approach and the screen suggested the value of both.

Chapter Five

The Social Skills Diagnostic Screen

The screen consists of four sections: personal factors; interpersonal factors; social reasoning skills; and classroom behaviors which represent more expansive investigations of the same four areas of reporting identified at level one. Each section contains a series of simple to administer and score questions. The screen may be administered in either individual or group settings, and may be completed by the student him or herself, a student's peer, the teacher, a parent or any other individual known to the subject in other than a casual manner. The screen is designed to be applicable to school-aged subjects, across all grade levels. The time taken to administer the screen varies from approximately 10 to 15 minutes with older subjects, to 20 to 30 minutes with younger subjects who may need to be interviewed on an individual basis.

Applications

There are five major applications of the screen. First, the screen may be used to identify the overall social skill level of a subject. The screen is able to identify a range of social behavior development, and provide a composite assessment of functioning across general areas of skill development. Subject social skill development is classed as 'well-developed,' 'developing appropriately' or 'requiring assistance' based on a numerical score.

Second, the screen may be used as an assessment tool for identifying particular areas of concern. In this capacity, the results from an application of the screen may be used as the basis for a detailed parent-teacher interview, or alternatively as a basis for a case study review of an individual student's level of development. Through both processes, specific areas of concern may be identified and problem areas pinpointed.

Third, the screen may provide a framework for an assessment of the effects of domestic or personal situations on the subject's social behavior. Through repeated administrations, and the development of composite profiles over a long-term assessment period, insights may be gained into the effects of personal or domestic situations on a subject.

Fourth, the screen may be used to investigate the effectiveness of particular intervention procedures. The effectiveness of particular intervention techniques may be assessed through both the review of numerical score differences and composite profiles. Given the multiple sections of the screen, improvement in certain areas may be highlighted through a review of student composite profiles, although significant differences may not show on the overall numerical score (See Appendix Four for examples of composite profiles).

Fifth, as a multiple interviewer tool, the screen provides a basis for identifying areas of agreement between respondents for the same subject. Once again, the use of composite profile diagrams allows the differences between raters to be readily identified. A composite mean score may also be obtained for each subject by concurrent multiple administrations.

Support Materials and Documents

Administration Manual for the Social Skills Diagnostic Screen

In support of the screen, an administration manual was developed as part of the project. The manual includes an introduction to the screen and its background and development. In addition, the manual includes instructions for scoring and score interpretations. Summary validity and reliability statistics for the screen itself are also included in the manual.

Social Skills Development Activity Manual

As a supporting resource for the *Social Skills Diagnostic Screen*, a *Social Skills Development Activity Manual* (Sherman, 1991) was also developed. The manual was designed specifically to be used in conjunction with the screen, and contains ideas, strategies and teaching strategies cross-referenced to particular categories and skills contained in the screen.

Pilot Test

Overall, the pilot test findings for the *Social Skills Diagnostic Screen* were positive, and suggested the general validity and reliability of the screen for use as part of the three level approach to social competence measurement (See Appendix One for a detailed summary of pilot-test data).

Pre-Test

Within the first phase of the pilot test, the screen demonstrated general content validity - although only limited concurrent validity with the *Social Skills Rating System* (Gresham & Elliott, 1900). The screen distinguished among the three student groups (well developed, developing appropriately and requiring assistance). Self rated and teacher scores, for example, generally differed for the three groups of students, although there were some areas of overlap between the groupings. Tests for reliability between different screen admissions (self, teacher and parent) showed limited significant correlations between raters, a finding that was consistent with previous research (Cartledge & Milburn, 1986).

Overall, mean scores for all subjects were higher than expected, with all students scoring 100 or more. Fifty-two of the 72 subjects were in the 151+ (Well Developed) range. Student self rater scores were consistently higher than the scores of other raters. The mean scores for parent, self and teachers were similar over the first three sections of the screen with the classroom behavior section omitted. Mean scores for the 'classroom behaviors' section, as rated by the student only, were proportionately higher than for the rest of the test particularly for 'developing appropriately' and 'well developed' subjects.

Across all subjects, and all grades, female subject mean scores were significantly higher than male mean scores (177.5 to 153.5). Mean scores by grade alone were similar. The construction of composite profiles for individual subjects suggested that such diagrams may prove useful visual tools for either case study or extended

interview discussions. The diagrammatic presentation of the scores enabled both differences and similarities to be clearly seen, as well as the overall results for the test.

Post-Test

Within the second (post-test) phase of the pilot test, the screen once again demonstrated general content validity. The screen distinguished among subjects based on the three **a priori** defined student groupings.

Tests for reliability between screen admissions by different raters (student, teacher and parent) once again showed limited significant correlations between raters. Mean scores in the post-test were similar to those of the pre-test. Mean scores for all subjects were once again higher than expected, as in the first phase of the pilot test; student rater means were once again consistently higher than parent or teacher raters; mean scores for the parent, self and teacher raters were similar over the first three sections of the screen; mean scores were proportionately higher for the 'classroom behaviors' section; female subject mean scores were higher than male mean scores; and mean scores by subject grade were similar. The composite profiles emerged as potentially valuable visual tools for discussion of subject social competence. T-test calculations revealed a high degree of correlation between test and re-test scores for individual subjects and demonstrated the test-retest reliability of the screen.

The use of the test to examine the effectiveness of the interventions introduced for subjects identified as 'requiring assistance' through the first phase of screen admission provided additional valuable findings. Ten of the 20 subjects who received interventions between the test and retest demonstrated some degree of improvement in mean score. In eight of a possible 16 cases, the parent rating was higher for the 'requiring assistance' subjects, some by a significant amount (15). However, not all increases were for the same subjects, and only half of the subjects showed an increase in mean score. Although it was encouraging to note any increase in skill level of the 'requiring assistance' students, it was not possible to identify any common factors in the increases. The nature of social behavior is such that it would be difficult to expect a significant rise in scores over such a relatively short time period. However, the small increases, as well as some written and verbal comments from parent and teacher raters indicate that the interventions may have had some positive effect. In a few cases, professional help had been sought and also family situations had changed, which had a positive influence on the subject.

The overall high mean scores for subjects as a whole suggested the need for student classification based on numerical scoring to be revised prior to further testing. Possible alternate scoring procedures include the use of either percentiles or test standard deviations to calculate numerical scoring designations.

Chapter Six

Summary and Conclusions

Summary

The focus on the assessing and reporting of student social skills reflects the district's recognition of the broadening mandate of schools in modern society. Schools are becoming increasingly responsible for the broad education of students that now includes a social dimension. Despite an extensive body of research on social competence, and its suggested significant role in student academic, social and psychological development, current definitions of social competence, as well as strategies for its measurement and reporting, in the school environment, are limited. In recognition of this, and as part of the Educational Quality Indicators initiative developed in collaboration with Alberta Education, the Fort McMurray School District No. 2833 undertook a study to examine the measurement of student social competence. The major purpose of the three-year project was to develop a set of social skills, behaviors and attitude indicators and standards which could then be used to assess the quality of a selected portion of one school jurisdiction's educational program and delivery.

The major outcomes of the research were twofold: first, the conceptualization of a systems model of social competence that drew on existing literature relating to the concept, and provided a framework for its definition and subsequent measurement; and second, the development of a three-level approach to assessing and reporting student social skill competence within the school environment. As part of this three-level approach, a standard measurement and reporting instrument, the *Social Skills Diagnostic Screen*, was developed and subsequently pilot-tested. In addition to the development of this standard measuring tool, an activity manual for teaching social skills was also prepared, for use in conjunction with the screen.

The development of the social competence model, and the associated assessment methodology was completed as part of a series of research stages. Initially, the concept of social competence was defined based on the findings of a substantive literature review and subsequent discussions of the concept by the project study team. As part of the second phase, standardized social skill measurement instruments were pilot-tested to determine their appropriateness for use in the school environment. As a result of the findings of these pilot tests, a more flexible and comprehensive assessment model was introduced that included a three-level assessment protocol that moved from the general to the specific. The second level of the approach included a specially developed assessment instrument the *Social Skills Diagnostic Screen.*

The findings of the three-year research project suggest the value of the three-level approach to assessing and reporting student social competence. Field-testing of standardized commercial instruments revealed considerable difficulty in their practical application in the everyday school setting - given both the unfamiliarity of teachers with the instruments themselves, as well as their unwieldy and complex nature which was reflected in the time taken to administer them. By contrast, the *Social Skills Diagnostic Screen*, developed in part from a review of existing instruments, proved more practical for classroom use, and in pilot testing

demonstrated some measure of statistical validity (content) and reliability (test-retest). The results of the limited pilot test of both the screen and the three-level approach to assessment suggest the value of both as part of an integrated assessment and reporting package.

Conclusions

The findings of the project cast considerable light on the complex nature of the measuring and reporting of student social competence. Challenges similar to those identified within the literature were initially encountered in defining social competence. The adoption of a systems perspective provided a broad framework for the conceptualization of social competence. It provided the framework for the inclusion of the context, input, process and outcome dimensions essential to any model of social competence. As a theoretical concept and practical component of everyday life and interactions, social competence retains an inherent dynamic quality that mitigates against its simple description. Rather, the concept needs to be expressed in 'fluid' terms that reflect its dynamic, and complex nature, as well as its link to day-to-day interactions.

Given the challenge in defining social competence, as well as the specific elements that contribute to it, the current project also revealed the complexity of its subsequent measurement and reporting. The initial field test of standardized commercial instruments failed to meet the project need for a practical assessment methodology that provided the basis for meaningful dialogue between teachers and parents on student social development. The subsequent development of a three-level approach represented a creative and innovative strategy that, based on limited field testing, proved practical, valid and reliable in the measurement and reporting of student social competence. While this approach performed satisfactorily within the pilot test, it requires further review and testing to confirm its validity, reliability and practicality as an assessment and reporting strategy.

Implications

The conceptual model of social competence developed within the current study, as well as the three-level approach to assessment designed to accompany it, both have potential for application within the school environment. Specifically, the three-level approach is research-based and cross-referenced to desirable student outcomes, and, thus, may be effectively used in varied school settings for assessing and reporting student social skills.

Empirically, the development of a valid, reliable and practical assessment and reporting methodology for student social competence is an important break-through. While several standardized commercial instruments are available, their application in the school environment is limited given their complexity in terms of administration and practicality for the classroom teacher.

As an extension of the advantage gained through the development of a practical assessment and reporting methodology, it may be anticipated that teachers will be able to address instruction in social skills more effectively and confidently. Not

only will teachers be in a position to determine the students' level of social competence, but they will also be able to review possible causes of skill deficits, as well as the impact of specific interventions designed to address deficits.

In the long term, the development of an effective assessment and reporting strategy may thus impact on the nature and content of social skills instruction in the classroom and school environments. Within this context, the *Social Skills Development Activity Manual*, (Sherman, 1991) developed in conjunction with the *Social Skills Diagnostic Screen*, may serve as a potentially valuable resource for teachers.

Recommendations

Based on the preliminary findings of the research to date, the major recommendation of the current study is that research continue in measuring and reporting social competence. Student social competence forms a key element of general educational development, and one that has frequently been overlooked given problems associated with both its definition and measurement in the school environment. Despite the encouraging results of the current research, more extensive field testing of the three-level assessment approach is required. Scoring norms need to be established for different user groups as well as for individual sections of the *Social Skills Diagnostic Screen* so that it may be more effectively used to pinpoint connections and specific areas requiring further assessment. More research is also required into the use of interventions to address student skill deficits. Specifically, the nature and extent of interventions needs to be clarified for individual students based on their individual needs.

To assist in this broader testing of the three level approach, as well as the screen itself, it is recommended that both be field-tested in a variety of school settings, as well as individual settings in long-term longitudinal studies. The findings from these more extensive field tests should yield valuable results regarding the validity, reliability and practicality of the assessment process.

Follow-up

Within the Fort McMurray context, follow-up to the project will be ongoing. Parents have requested additional information on strategies they may use with their own children to work on appropriate social skill development. Similarly, professional and support staff from across the school district have expressed the wish both to facilitate and take part in initiatives relating to the whole area of social skills development and assessment. At the district level, the board has determined that student social competence will become a priority for the 1992 - 1993 school year. As part of this, the three-level approach will become an integral component of the policy and practice of the district.

Follow-up activities need to be completed in regard to the assessment approach itself, and may be anticipated to form part of an ongoing review. Specifically, the following areas of the approach would benefit from further substantive review. First, the numerical ranges currently used to classify the level of social skill development require re-examination. The high mean scores gained across all screen applications indicate that the instrument is not currently 'sorting' students

effectively. Second, the intervention programs developed to improve student social skill development require further study. The findings of the current pilot test of the assessment approach indicated only limited student skill development in response to the interventions. The interventions did appear, however, to improve student assessment of their own skill level.

Third, teachers, administrators and parents need to address the coordinated reinforcement of social skills in the home, and the school. For 'real behavior' changes to take place a consistent strategy for reinforcement must be established.

Concluding Statement

The model of social competence developed within the current study, and its extension into a three-level approach to assessing and reporting for use in the school environment, forms an important initiative in the ongoing review of educational quality. The assessment and reporting of student social competence within the school context has, to date, been limited, with educators forced to rely on standardized commercial instruments that frequently do not meet either the needs of students or staff. The need for students to develop an appropriate level of social competence is critical, given its close relationship with other areas of educational performance and growth.

The three-level approach to measuring social skills and its second level *Social Skills Diagnostic Screen*, form one response to the need for positive indicators and standards that address student social skills in the school environment. This project has focussed on the development of an assessment model that is straightforward to use and practical. If the research has raised an awareness of the importance of social skill acquisition as it relates to student development, then a further goal has been met.

References

Alberta Education (1989). *Guide to education: Junior high school handbook 1989 - 90.* Edmonton, Alberta: Alberta Education.

Allyon, T. and Azrin, N. (1968). *The token economy.* New York: Appleton - Century-Crofts.

Bandura, A. (1977). *Social learning theory.* Englewood Cliffs, NJ: Prentice-Hall.

Beck, S. (1986). Methods of assessment II: Questionnaires and checklists. In C.L. Frame and J.L. Matson (Eds.), *Handbook of Assessment in Childhood Pathology.* New York: Plenum Press.

Bornstein, M.R., Bellack, A.S. & Hersen, M. (1977). Social-skills training for unassertive children: A Multiple-baseline analysis. *Journal of Applied Behavior Analysis*, 10, 183 - 95.

Cartledge, G. & Milburn, J.A. (1986). *Teaching social skills to children.* New York: Pergamon Press.

Clarke, L., Gresham, F.M., & Elliott, S.N. (1985). Development and validation of a social skills assessment measure: The Tross-C. *Journal of Psychoeducational Assessment*, 4, 347-56.

Greenwood, C.R., Walker, H.M., & Hops, H. (1977). Some issues in social interaction/withdrawal assessment. *Exceptional Children*, 43, 490 - 99.

Gresham, F.M. (1983). Social validity in the assessment of children's social skills. Establishing standards for social competency. *Journal of Psychoeducational Assessment*, 1, 297 - 307.

Gresham, F.M. & Elliott, S.N. (1984). Assessment and classification of children's social skills: A review of methods and issues. *School Psychology Review*, 13, 292 - 301.

Gresham, F.M. & Elliott, S.N. (1990). *Social Skills Rating System.* Circle Pine, MN: American Guidance Service.

Hargie, O. & P. McCartan (1986). *Social skills training and psychiatric nursing.* London: Croom Helm.

Harter, S. (1985). *Manual for the Self-Perception Profile for Children.* Denver: University of Denver.

Harter, S. (1988). *Manual for the Self-Perception Profile for Adolescents.* Denver: University of Denver.

Hops, H. & Lewin, L. (1984). Peer sociometric forms. In T.H. Ollendick & M. Hersen (Eds.), *Child Behavioral Assessment.* New York: Pergamon Press.

Hymel, S. (1983). Preschool children's peer relations: Issues in sociometric assessment. *Merrill-Palmer Quarterly*, 29, 237 - 60.

Libet, J., & Lewinsohn, P.M. (1973). The concept of social skill with special reference to the behavior of depressed persons. *Journal of Consulting and Clinical Psychology*, 40, 304 - 12.

Mager, R.G., & Pipe, P. (1970). *Analyzing performance problems*. Belmont, CA: Fearon.

McFall, R.M. (1982). A review and reformulation of the concept of social skills. *Behavioral Assessment*, 4, 1 - 33.

Michelson, L., Sugai, D.P., Wood, R.P., & Kazdin, A.E. (1983). *Social skill assessment and training with children*. New York: Plenum Press.

Ollendick, T.H., & Hersen, M. (1984). *Child behavior assessment*. Elmsford, New York: Pergamon Press.

Perry, D.G., & Perry, L.C. (1987, July). *Applications of Dodge's social information processing model of social competence to the study of prosocial behavior in children*. Paper presented at the Biennial meeting of the International Society for the Study of Behavioral Development, Tokyo, Japan.

Presseisen, B.Z. (1987) *Thinking skills throughout the curriculum*. Bloomington: Pi Pi Lambda Theta.

Province of Alberta (1988). *School Act*. Edmonton, Alberta: Queen's Printer.

Reschly, D.J., & Gresham, F.M. (1981). *Use of social competence measures to facilitate parent and teacher involvement and non-biased assessment*. IOWA: Iowa State University.

Sherman, A. (1991). *Social skills development activity manual*. Fort McMurray Public School District No. 2833.

Walker, H.M., & Hops, H.(1976). Increasing academic achievement by reinforcing direct academic performance and/or facilitative non-academic responses. *Journal of Educational Psychology*, 68, 218 - 225.

Worthen, B.R., & Saunders, J.R. (1987). *Educational evaluation: Alternative approaches and practical guidelines*. New York: Longman.

Appendix One

Social Skills Diagnostic Screen

Pilot Test Results

I. Pilot Test: Pre-Test Administration – January 1992

A. SAMPLE INFORMATION

initial number of subjects	104
absences	4
lack of parental consent	26
incomplete teacher screens	2
sample	72

designations:

Students Well Developed (WD)	23
Students Developing Appropriately (DA)	27
Students Requiring Assistance (RA)	22

B. MEAN SCORES FOR SCREEN APPLICATION

Student and teacher data refer to all 4 sections of the screen. Parent (3), Teacher (3), and Student (3) refer to the first 3 sections only.

1. By Interviewer:

	Student	Teacher	Parent (3)	Teacher (3)	Student (3)
minimum score	116	64	50	41	86
maximum score	212	218	177	168	162
range	96	154	127	127	76
mean	171.5	154.3	127.4	116.8	130
standard deviation	22.90	39.59	23.14	30.30	17.92
standard error	2.70	4.67	2.73	3.57	2.11

2. By Student Grouping:

(a) well developed					
minimum score	141	154	107	113	110
maximum score	212	218	177	168	162
range	71	64	70	55	52
mean	184.8	188.7	141.2	138.9	139.9
(b) developing appropriately					
minimum score	135	117	84	89	110
maximum score	208	200	162	151	159
range	73	83	78	62	49
mean	177.6	164.2	133.9	124.2	135

(c) requiring assistance					
minimum score	116	64	50	41	86
maximum score	197	146	145	111	157
range	81	82	95	70	71
mean	150	106	104.9	80.7	113.7

3. All subjects, Student and Teacher Raters:

minimum	103
maximum	210
range mean	107
mean	162.9
standard deviation	27.84
standard error	3.28

4. Number of subjects with mean scores:

151+	52
100 - 150	20
< 100	0

5. By Gender: (Scores):

	Number	Student	Teacher	Parent (3)	Teacher (3)	Student (3)
male	43	163	144	122	110	123
female	29	185	170	136	127	141
total	72	174	157			

6. By Grade and Gender:

		Student	Teacher	Parent (3)	Teacher (3)	Student (3)	All Raters (4)*	All Raters (3)**
Grade 1								
male	6	166	128	112	98	124	147	111
female	4	179	180	143	136	132	179	137
Grade 2								
male	6	167	149	130	112	127	158	123
female	4	185	152	139	118	142	169	133
Grade 3								
male	6	159	139	125	110	119	149	118
female	3	180	156	121	116	137	168	125
Grade 4								
male	5	166	152	125	109	125	159	120
female	3	191	183	148	135	146	187	143
Grade 5								
male	3	177	141	114	104	131	159	116
female	6	204	172	133	128	156	188	139

* Student/Teacher

** Student/Teacher/Parent

		Student	Teacher	Parent (3)	Teacher (3)	Student (3)	All Raters (4)*	All Raters (3**)
Grade 6								
male	6	154	155	121	120	118	155	120
female	0	-	-	-	-	-	-	-
Grade 7								
male	6	160	170	126	132	122	165	126
female	7	173	161	130	121	131	167	127
Grade 8								
male	5	156	121	121	95	121	138	112
female	2	184	184	144	138	141	184	141

* Student/Teacher
** Student/Teacher/Parent

C. SOCIAL SKILLS RATING SYSTEM (GRESHAM & ELLIOTT, 1990) TEST SCORES

Grades 3 - 6:	
number of subjects	10
minimum standard score	82
maximum standard score	116
behavior level classification:	
fewer*	1
average**	8
more***	1
Grades 7 - 8:	
number of subjects	6
minimum standard score	68
maximum standard score	96
behavior level classification:	
fewer*	3
average**	3
more***	0

*The student exhibits fewer social skills than the average for the standardization sample comparison group. Performance one standard deviation or more below the standardization sample comparison group.

**The student exhibits as many social skills as the average for the standardization sample comparison group. Performance within one standard deviation above or below the standardization sample comparison group mean.

***The student exhibits more social skills than the average for the standardization sample comparison group. Performance one standard deviation or more above the standardization sample comparison group mean.

D. SUBSECTION 4: MEAN SCORES CLASSROOM BEHAVIOR SECTION ONLY:

mean by designation:

	Student	Teacher
WD	44.65	45.43
DA	42.59	39.67
RA	36.36	19.19
all	41.20	34.76

E. INTER-RATER RELIABILITY

Paired T-Tests

(a) Student - Teacher over 4 sections:

Paired t value :	4.443
degrees of freedom :	71
probability	<.001

Significant difference between mean scores.

(b) Parent - Teacher over 3 sections:

Paired t value :	3.632
degrees of freedom :	71
probability	<.001

Significant difference between mean scores.

(c) Parent - Student over 3 sections:

Paired t value :	-1.011
degrees of freedom :	71
probability	.32

No significant difference between mean scores.

(d) Teacher - Student over 3 sections

Paired t value :	-4.373
degrees of freedom :	71
probability	<.001

Significant difference between mean scores.

F. CONTENT VALIDITY

See mean scores for student groupings.

II. Pilot Test: Post-Test Administration – April-May 1992

A. SAMPLE INFORMATION

phase II testing subjects	72
number unable to participate	4
number of subjects in both phases	68
number of subjects in phase III only	4
number of subjects in phase III	72

designations:

Students Well Developed (WD)	24
Students Developing Appropriately (DA)	25
Students Requiring Assistance (RA)	23

B. MEAN SCORES FOR SCREEN APPLICATION

Student and teacher data refer to all 4 sections of the screen. Parent (3), Teacher (3), and Student (3) refer to the first 3 sections only.

1. By Interviewer:

	Student	Teacher	Parent (3)	Teacher (3)	Student (3)
minimum score	109	59	64	46	85
maximum score	215	220	165	169	166
range	106	161	101	123	81
mean	171.5	156.4	129.6	118.0	131.2
standard deviation	25.00	39.14	21.71	29.57	19.65
standard error	2.95	4.61	2.61	3.44	2.32

2. By Student Grouping:

(a) well developed (WD)

minimum score	150	153	117	117	119
maximum score	215	219	159	169	166
range	65	66	42	52	47
mean	189	186.4	140.3	140.3	144.0

(b) developing appropriately (DA)

minimum score	130	117	77	90	103
maximum score	213	220	165	170	163
range	83	103	88	80	60
mean	176.2	167.7	135.4	126.3	135.8

(c) requiring assistance (RA)

minimum score	109	59	64	46	85
maximum score	180	163	134	117	138
range	71	104	70	71	53
mean	148.0	109.2	110.0	83.8	112.7

3. All subjects, Student and Teacher Raters:

minimum	96
maximum	210
range mean	114
mean	163.5
standard deviation	29.43
standard error	3.47

(a) by designation

(1) WD

minimum	159
maximum	210
range	51
mean	187.7

(2) DA

minimum	133
maximum	204
range	71
mean	172.3

(3) RA

minimum	96
maximum	162
range	66
mean	128.8

4. Number of subjects with mean scores:

151+	50
100 - 150	21
< 100	1

5. By Gender:

	Number	Student	Teacher	Parent (3)	Teacher (3)	Student (3)
male	39	161.4	143.3	125.4	111.3	124.8
female	33	180.4	168.0	138.0	126.9	140.9
totals	72					
overall means	4 sections	3 sections				
male	152.35	120.49				
female	174.18	135.2				

6. By Grade and Gender:

		Student	Teacher	Parent (3)	Teacher (3)	Student (3)	All Raters (4)*	All Raters (3)**
Grade 1								
male	6	168.2	130.0	117.8	98.0	130.0	157.5	115.3
female	5	186.2	184.4	142	140.0	141.0	185.3	141.0
Grade 2								
male	6	168.2	160.2	137.2	125.2	133.6	164.2	132.0
female	4	183.0	159.0	130.0	122.5	138.5	171.0	130.2
Grade 3								
male	6	161.7	137.8	131.0	105.5	125.2	149.8	120.6
female	3	167.7	141.6	127.7	107.0	123.2	154.6	119.3
Grade 4								
male	5	162.6	127.5	121.4	95.0	125.6	145.0	114.0
female	4	187.8	186.0	153.8	136.3	151.8	186.9	147.3
Grade 5								
male	1	171.0	158.0	126.0	120.0	137.0	164.5	134.6
female	6	196.0	167.0	140.0	124.5	150.0	181.5	138.2
Grade 6								
male	6	152.3	159.5	125.2	123.3	117.7	155.9	122.1
female	0	-	-	-	-	-	-	-
Grade 7								
male	5	157.2	140.7	119.0	121.0	115.0	148.9	118.5
female	8	156.5	164.0	133.5	124.3	138.5	160.3	132.1
Grade 8								
male	4	150.0	132.8	124.7	102.5	114.3	141.4	113.8
female	3	185.3	174.0	138.7	133.3	143.0	179.7	138.3

* Student/Teacher
** Student/Teacher/Parent

C. INTER-RATER RELIABILITY

Paired T-Tests

(a) Student - Teacher over 4 sections:

Paired t value : -4.213
degrees of freedom : 70
probability <.001

Significant difference between mean scores.

(b) Parent - Teacher over 3 sections:

Paired t value :	3.424
degrees of freedom :	68
probability	.001

Significant difference between mean scores.

(c) Parent - Student over 3 sections:

Paired t value :	-.791
degrees of freedom :	67
probability	.43

No significant difference between mean scores.

(d) Teacher - Student over 3 sections

Paired t value :	-4.752
degrees of freedom :	71
probability	<.001

Significant difference between mean scores.

D. CONTENT VALIDITY

See mean scores for student groupings.

III. Pre-Test and Post-Test Data Comparison

A. SAMPLE INFORMATION

	Pre-Test	Post-Test
initial number of subjects	104	**72**
absences	4	**4**
lack of parental consent	26	
incomplete teacher screens	2	
original subjects able to participate in III		**4**
sample	72	**72**
designations:		
Students Well Developed (WD)	23	**24**
Students Developing Appropriately (DA)	27	**25**
Students Requiring Assistance (RA)	22	**23**

B. MEAN SCORES FOR SCREEN APPLICATION

Note. Pre-test is regular type, **Post-test is bold type.**

1. By Interviewer:

	Student		Teacher		Parent (3)		Teacher (3)		Student (3)	
minimum score	116	**109**	64	**59**	50	**64**	41	**46**	86	**85**
maximum score	212	**215**	218	**220**	177	**165**	168	**169**	162	**166**
range	96	**106**	154	**161**	127	**101**	127	**123**	76	**81**
mean	172	**172**	154	**156**	127	**130**	117	**118**	130	**131**

2. By Student Grouping:

(a) well developed

minimum score	141	**150**	154	**153**	107	**117**	113	**117**	110	**119**
maximum score	212	**215**	218	**219**	177	**159**	168	**169**	162	**166**
range	71	**65**	64	**66**	70	**42**	55	**52**	52	**47**
mean	185	**189**	189	**186**	141	**140**	139	**140**	140	**144**

(b) developing appropriately

minimum score	135	**130**	117	**117**	84	**77**	89	**90**	110	**103**
maximum score	208	**213**	200	**220**	162	**165**	151	**170**	159	**163**
range	73	**83**	83	**103**	78	**88**	62	**80**	49	**60**
mean	178	**176**	164	**168**	134	**135**	124	**126**	135	**136**

(c) requiring assistance

minimum score	116	**109**	64	**59**	50	**64**	41	**46**	86	**85**
maximum score	197	**180**	146	**163**	145	**134**	111	**117**	157	**138**
range	81	**71**	82	**104**	95	**70**	70	**71**	71	**53**
mean	150	**148**	106	**109**	105	**110**	81	**84**	114	**113**

3. All subjects, Student and Teacher Raters:

minimum	103	**96**
maximum	210	**210**
range mean	107	**114**
mean	162.9	**163.5**
standard deviation	27.84	**29.43**
standard error	3.28	**3.47**

4. Number of subjects with mean scores:

	Pre-test	**Post-test**
151+	52	**50**
100 - 150	20	**21**
< 100	0	**1**

5. By Gender:

	Number		Student		Teacher		Parent (3)		Teacher (3)		Student (3)	
male	43	**39**	163	**161**	144	**143**	122	**125**	110	**111**	123	**125**
female	29	**33**	185	**180**	170	**168**	136	**138**	127	**127**	141	**141**

6. By Grade and Gender:

	n	n	Student		Teacher		Parent (3)		Teacher (3)		Student (3)	
Grade 1												
male	6	**6**	166	**168**	128	**130**	112	**118**	98	**98**	124	**130**
female	4	**5**	179	**186**	180	**184**	143	**142**	136	**140**	132	**141**
overall grade:												
(4)*	147	**149**	(3)**	111	**115**							
	179	**185**	(3)**	137	**141**							
Grade 2												
male	6	**6**	167	**168**	149	**160**	130	**137**	112	**125**	127	**134**
female	4	**4**	185	**183**	152	**159**	139	**130**	118	**123**	142	**139**
overall grade:												
(4)*	158	**164**	(3)**	123	**132**							
	169	**171**	(3)**	133	**130**							
Grade 3												
male	6	**6**	159	**162**	139	**138**	125	**131**	110	**106**	119	**125**
female	3	**3**	180	**168**	156	**142**	121	**128**	116	**107**	137	**123**
overall grade:												
(4*)	149	**150**	(3)**	118	**121**							
	168	**155**	(3)**	125	**119**							
Grade 4												
male	5	**5**	166	**163**	152	**128**	125	**121**	109	**95**	125	**126**
female	3	**4**	191	**188**	183	**186**	148	**154**	135	**136**	146	**152**
overall grade:												
(4)*	159	**145**	(3)**	120	**114**							
	187	**187**	(3)**	143	**147**							

* Student/Teacher

** Student/Teacher/Parent

	n	n	Student		Teacher		Parent (3)		Teacher (3)		Student (3)	
Grade 5												
male	3	**1**	177	**171**	141	**158**	114	**126**	104	**120**	131	**137**
female	6	**6**	204	**196**	172	**167**	133	**140**	128	**125**	156	**150**
overall grade:												
(4)*	159	**165**	(3)**	116	**135**							
	188	**182**	(3)**	139	**138**							
Grade 6												
male	6	**6**	154	**152**	155	**159**	121	**125**	120	**123**	118	**118**
female	0	**0**	-	-	-	-	-	-	-	-	-	-
overall grade:												
(4)*	155	**156**	(3)**	120	**122**							
Grade 7												
male	6	**5**	160	**157**	170	**141**	126	**119**	132	**121**	122	**115**
female	7	**8**	173	**157**	161	**164**	130	**134**	121	**124**	131	**139**
overall grade:												
(4)*	165	**149**	(3)**	126	**118**							
	167	**160**	(3)**	127	**132**							
Grade 8												
male	5	**4**	156	**150**	121	**133**	121	**125**	95	**103**	121	**114**
female	2	**3**	184	**185**	184	**174**	144	**139**	138	**133**	141	**143**
overall grade:												
(4)*	138	**141**	(3)**	112	**114**							
	184	**180**	(3)**	141	**138**							

* Student/Teacher
** Student/Teacher/Parent

C. TEST-RETEST RELIABILITY

Paired T-Tests

(a) Student raters over both tests
Paired t values : -.376
degrees of freedom : 67
probability .71

No significant difference between mean scores.

(b) Teacher raters over both tests
Paired t values : -.51
degrees of freedom : 67
probability .61

No significant difference between mean scores.

Appendix Two

School Report Cards

ECS

W	-	WELL ESTABLISHED
M	-	MOST OF THE TIME
SD	-	SHOWING DEVELOPMENT
S	-	SOMETIMES
NT	-	NOT PRESENTED YET
N	-	NOT AT THIS TIME

	TERM		
SELF-CONCEPT DEVELOPMENT	1	2	3
Displays confidence in his/her abilities.			
Works independently.			
Chooses a variety of activities.			
Takes responsibility for his/her behavior.			
Takes good care of classroom materials.			
Understands classroom routines.			

	TERM		
SOCIAL AND EMOTIONAL DEVELOPMENT	1	2	3
Works and plays well with others.			
Expresses emotions appropriately.			
Shows an interest in group activities for an increasing amount of time.			

GRADES 1, 2, 3

RATING SCALE
W - Well Developed S - Showing Development N - Needs Development

GROWTH AS AN INDIVIDUAL	REPORTING PERIOD 1st	2nd	3rd
Practices self control.			
Accepts responsibility for actions.			
Shows increasing self-confidence.			
Displays a positive attitude.			
Cooperates with and shows consideration for others.			
Resolves problems.			
Listens attentively.			
Follows classroom procedures.			
Cares for possessions and property.			
Uses time efficiently.			
Works independently.			

GRADES 4, 5, 6

Progress in specific aspects of each subject

WD - Well Developed
SD - Showing Development
ND - Needs Development
/ - Concept Not Yet Covered

GROWTH AS AN INDIVIDUAL	REPORTING PERIOD 1st	2nd	3rd
Practices self control.			
Demonstrates a positive awareness of other individuals, groups and cultures.			
Works independently.			
Accepts responsibility.			
Follows classroom routines.			
Listens attentively.			
Completes assignments, projects and homework.			

GRADES 7 & 8

INDIVIDUAL GROWTH

RATING SCALES

WD	-	Well Developed
SD	-	Showing Development
ND	-	Needs Development

Work Habits Expectations

Completes tasks and assignments.

Contributes constructively to discussions.

Completes homework.

Works well in groups.

Individual Development Expectations

Is courteous, considerate and respectful.

Is co-operative.

Accepts responsibility for own behavior.

Shows initiative.

Appendix Three

Social Skills Diagnostic Screen

This *checklist* has been designed to enable the classroom teacher to make a quick assessment of a student's social development in various areas related to school success. For a more detailed assessment, contact the school counsellor.

DIRECTIONS: Put a dot somewhere on the line under the statement which best describes the student's behavior for each of the items listed.

TO OBTAIN SCORE:

Count:		
	1 point	Rarely
	2 points	Occasionally
	3 points	About Half Time
	4 points	Often
	5 points	Almost Always

TO FORM A PROFILE: Join the dots.

Student's Name:_____ Date of Screening: _____

Birthdate: _____ Teacher: _____

School: _____

PERSONAL FACTORS	Rarely	Occasionally	About Half Time	Often	Almost Always
1. Shows consideration for how others feel.					
2. Interested in good grooming and appearance.					
3. Accepts responsibility for actions.					
4. Expresses feelings in a positive and appropriate manner.					
5. Is self-confident in areas of strength.					
6. Acts appropriately for age.					
7. Shows initiative.					
8. Does well at school work.					
9. Is good at sports.					
10. Controls anger.					
TOTALS:	___x1 =	___x2 =	___x3 =	___x4 =	___x5 =

PERSONAL FACTORS

GRAND TOTAL = (Columns 1+2+3+4+5)	____ 50

INTERPERSONAL FACTORS	Rarely	Occasionally	About Half Time	Often	Almost Always
1. Makes friends easily.					
2. Makes friends he/she can really trust and shares thoughts.					
3. Understands and helps others.					
4. Says nice things to others when they have done something well.					
5. Shares and cooperates with peers.					
6. Can explain opinions, beliefs and/or feelings easily.					
7. Uses "body language" appropriately to support verbal messages (e.g., smiles, waves, nods, etc).					
8. Shows a reasonable amount of assertiveness.					
9. Can start and end conversations without feeling nervous or uneasy.					
10. Politely questions rules that may be unfair.					
11. Actively listens to others when they are talking.					
12. Asks questions skillfully.					
13. Participates in group activities.					
14. Adapts easily to new situations.					
15. Accepts people who are different.					
16. Can compromise where it seems appropriate.					
TOTALS:	___ x 1 =	___ x 2 =	___ x 3 =	___ x 4 =	___ x 5 =

INTERPERSONAL FACTORS

GRAND TOTAL (Columns 1+2+3+4+5)	=	___ / 80

SOCIAL REASONING SKILLS	Rarely	Occasionally	About Half Time	Often	Almost Always
1. Recognizes unusual aspects of social situations.					
2. Can relate new social situations to previous social situations.					
3. Understands why things have happened as they have.					
4. Can resolve problems.					
5. Can create novel responses to problems.					
6. Makes decisions thoughtfully.					
7. Can choose the best alternative.					
8. Shows curiosity.					
TOTALS:	___ x 1 =	___ x 2 =	___ x 3 =	___ x 4 =	___ x 5 =

SOCIAL REASONING SKILLS: FACTORS:

GRAND TOTAL (Columns 1+2+3+4+5)	=	___ / 40

CLASSROOM BEHAVIORS	Rarely	Occasionally	About Half Time	Often	Almost Always
1. Initiates interaction with teacher when appropriate.					
2. Can work independently.					
3. Perseveres in activities for an appropriate length of time.					
4. Contributes to discussions.					
5. Follows classroom procedures.					
6. Does homework on time.					
7. Is careful of possessions and property.					
8. Listens to the teacher when directions are being given.					
9. Completes tasks.					
10. Uses time efficiently.					
TOTALS:	___ X 1 =	___ X 2 =	___ X 3 =	___ X 4 =	___ X 5 =

CLASSROOM BEHAVIORS: FACTORS:

GRAND TOTAL = ____
(Columns 1+2+3+4+5) 50

SCREEN AGGREGATE:

1. Personal Factor Grand Total: /50
2. Interpersonal Factor Grand Total: /80
3. Social Reasoning Skills Grand Total: /40
4. Classroom Behaviors Grand Total: /50

(Add Grand Total Scores) = _____
/220

ASSESSMENT RANGES:

186+ - WELL DEVELOPED
135-185 - DEVELOPING APPROPRIATELY
0-134 - REQUIRES ASSISTANCE

Appendix Four

Composite Student Profiles

Sample Composite Student Profile

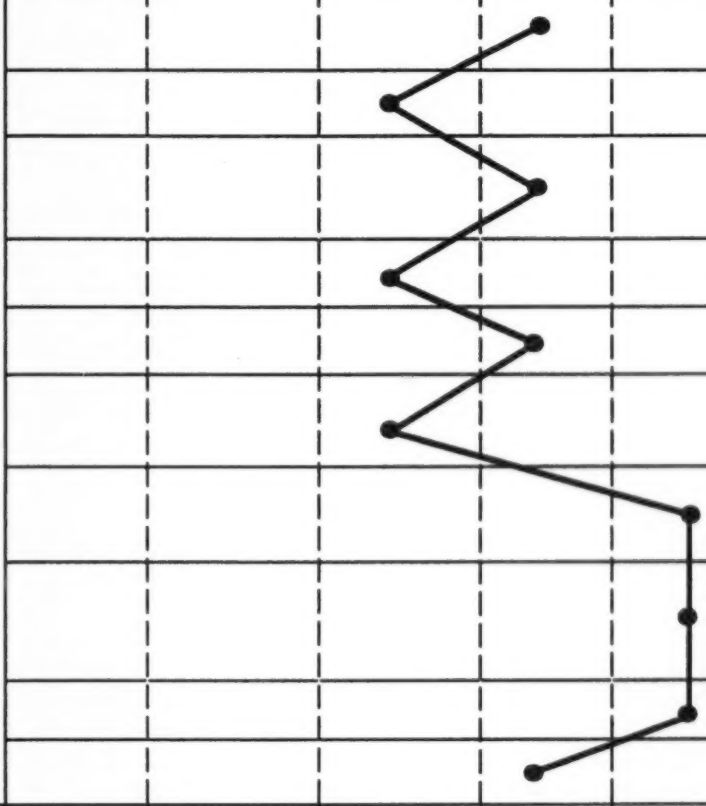
CLASSROOM BEHAVIORS	Rarely	Occasionally	About Half Time	Often	Almost Always
1. Initiates interaction with teacher when appropriate.			△		○ □
2. Can work independently.					○ △ □
3. Perseveres in activities for an appropriate length of time.					○ △ □
4. Contributes to discussions.				△ □	○
5. Follows classroom procedures.				□	△ ○
6. Does homework on time.				□ △ ○	
7. Is careful of possessions and property.				□ △ ○	
8. Listens to the teacher when directions are being given.				□	△ ○
9. Completes tasks.					○ △ □
10. Uses time efficiently.			△ □		○
TOTALS:	__ X 1 =	__ X 2 =	__ X 3 =	__ X 4 =	__ X 5 =

Responses By:

△ Teacher □ Peer ○ Student

Sample Section and Aggregate Scoring

CLASSROOM BEHAVIORS	Rarely	Occasionally	About Half Time	Often	Almost Always
1. Initiates interaction with teacher when appropriate.					
2. Can work independently.					
3. Perseveres in activities for an appropriate length of time.					
4. Contributes to discussions.					
5. Follows classroom procedures.					
6. Does homework on time.					
7. Is careful of possessions and property.					
8. Listens to the teacher when directions are being given.					
9. Completes tasks.					
10. Uses time efficiently.					
TOTALS:	0 X 1 =	0 X 2 =	3 X 3 = 9	4 X 4 = 16	3 X 5 = 15



CLASSROOM BEHAVIORS: FACTORS:

GRAND TOTAL = ___
(Columns 1+2+3+4+5) 50

SCREEN AGGREGATE:

1.	Personal Factor Grand Total:	40 /50
2.	Interpersonal Factor Grand Total:	67 /80
3.	Social Reasoning Skills Grand Total:	35 /40
4.	Classroom Behaviors Grand Total:	40 /50
(Add Grand Total Scores)	=	**182**
		/220

ASSESSMENT RANGES:

186+ - WELL DEVELOPED
135-185 - DEVELOPING APPROPRIATELY
0-134 - REQUIRES ASSISTANCE

PERSONAL FACTORS	Rarely	Occasionally	About Half Time	Often	Almost Always
1. Shows consideration for how others feel.					
2. Interested in good grooming and appearance.					
3. Accepts responsibility for actions.					
4. Expresses feelings in a positive and appropriate manner.					
5. Is self-confident in areas of strength.					
6. Acts appropriately for age.					
7. Shows initiative.					
8. Does well at school work.					
9. Is good at sports.					
10. Controls anger.					
TOTALS:	__x1 =	__x2 =	__x3 =	__x4 =	__x5 =

PERSONAL FACTORS

GRAND TOTAL = (Columns 1+2+3+4+5) ____ 50

INTERPERSONAL FACTORS	Rarely	Occasionally	About Half Time	Often	Almost Always
1. Makes friends easily.					
2. Makes friends he/she can really trust and shares thoughts.					
3. Understands and helps others.					
4. Says nice things to others when they have done something well.					
5. Shares and cooperates with peers.					
6. Can explain opinions, beliefs and/or feelings easily.					
7. Uses "body language" appropriately to support verbal messages (e.g., smiles, waves, nods, etc).					
8. Shows a reasonable amount of assertiveness.					
9. Can start and end conversations without feeling nervous or uneasy.					
10. Politely questions rules that may be unfair.					
11. Actively listens to others when they are talking.					
12. Asks questions skillfully.					
13. Participates in group activities.					
14. Adapts easily to new situations.					
15. Accepts people who are different.					
16. Can compromise where it seems appropriate.					
TOTALS:	__x1 =	__x2 =	__x3 =	__x4 =	__x5 =

INTERPERSONAL FACTORS

GRAND TOTAL = (Columns 1+2+3+4+5) ____ 80

SOCIAL REASONING SKILLS	Rarely	Occasionally	About Half Time	Often	Almost Always
1. Recognizes unusual aspects of social situations.					
2. Can relate new social situations to previous social situations.					
3. Understands why things have happened as they have.					
4. Can resolve problems.					
5. Can create novel responses to problems.					
6. Makes decisions thoughtfully.					
7. Can choose the best alternative.					
8. Shows curiosity.					
TOTALS:	__ x 1 =	__ x 2 =	__ x 3 =	__ x 4 =	__ x 5 =

SOCIAL REASONING SKILLS: FACTORS:

GRAND TOTAL (Columns 1+2+3+4+5)	=	__ /40

CLASSROOM BEHAVIORS	Rarely	Occasionally	About Half Time	Often	Almost Always
1 Initiates interaction with teacher when appropriate.					
2 Can work independently.					
3 Perseveres in activities for an appropriate length of time.					
4 Contributes to discussions.					
5 Follows classroom procedures.					
6 Does homework on time.					
7 Is careful of possessions and property.					
8. Listens to the teacher when directions are being given.					
9. Completes tasks.					
10. Uses time efficiently.					
TOTALS:	__ X 1 =	__ X 2 =	__ X 3 =	__ X 4 =	__ X 5 =

CLASSROOM BEHAVIORS: FACTORS:

GRAND TOTAL (Columns 1+2+3+4+5)	=	__ /50

SCREEN AGGREGATE:

1.	Personal Factor Grand Total:	/50
2.	Interpersonal Factor Grand Total:	/80
3.	Social Reasoning Skills Grand Total:	/40
4.	Classroom Behaviors Grand Total:	/50
(Add Grand Total Scores)	=	/220

ASSESSMENT RANGES:

186+	- WELL DEVELOPED
135-185	- DEVELOPING APPROPRIATELY
0-134	- REQUIRES ASSISTANCE

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